

AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Currently Amended) A ball screw comprising:

a number of balls;

a screw shaft having a helical thread groove formed on an outer surface thereof;

a nut having a thread groove formed on an inner surface thereof corresponding to the thread groove on said screw shaft which engages with said screw shaft with the interposition of the number of balls rollably provided ~~with a spacer~~ for retaining ~~a ball~~ the balls interposed therebetween in a helical ball rolling path formed between said two thread grooves; and

spacers disposed between adjacent ones of said number of balls,

wherein a variation of the total of gaps between said balls and said spacers during the rolling of said balls is smaller than 1/20 of the diameter of said ball.

3. (Canceled)

4. (Original) The ball screw according to Claim 2, wherein the variation of the total of gaps is adjusted by at least one of designed values of

a height of the ball circulating path from the center of the screw shaft,

a scooping angle of the ball, and

a radius of curvature of a bent portion of the ball circulating path.

5. (Canceled)

6. (Original) The ball screw according to Claim 2, wherein said nut is provided with a ball circulating path that has an inner diameter slightly larger than the outer diameter of the ball.

7. (Canceled)

8. (Original) The ball screw according to Claim 6, wherein said ball circulating path comprises a return tube.